AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) An apparatus comprising:

a first processing circuit configured to generate a plurality of reconstructed samples in response to a plurality of macroblocks of an input signal; and

a second processing circuit configured to (A) generate a plurality of sum values based on said reconstructed samples, said sum values being used in ~~defining~~ a plurality of formulas organized as a plurality of groups ~~prediction types based on a number of said sum values that are available~~ and (B) individually determine a plurality of intra prediction DC predictors for each of a plurality of chroma sub-blocks respectively of a current macroblock, wherein (i) all of said intra prediction DC predictors are generated using said formulas in a first of said groups ~~prediction types~~ when all of said sum values are available~~,~~ and (ii) both (a) ~~a first subset~~ one of said intra prediction DC predictors is ~~are~~ generated using a respective one of said formulas in a second of said groups ~~said first prediction type~~ and (b) a remainder ~~second subset~~ of said intra prediction DC predictors are generated using respective ones of said formulas in said first group ~~a second of said prediction types~~ when only a single one of said sum values is unavailable.

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2.   (ORIGINAL) The apparatus according to claim 1, wherein said second processing circuit is implemented in a decoding loop of an encoder.

3.   (ORIGINAL) The apparatus according to claim 1, wherein said first and said second processing circuits comprise a decoder.

4.   (ORIGINAL) The apparatus according to claim 1, wherein said apparatus comprises an H.264 compliant decoder.

5.   (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said second processing circuit comprises:

a third processing circuit configured to generate an intra predicted chroma sub-block in response to one of said intra prediction DC predictors.

6.   (ORIGINAL) The apparatus according to claim 5, wherein said second processing circuit further comprises:

a control circuit configured to generate said intra prediction DC predictor for each of said chroma sub-blocks in response to said reconstructed samples.

7.   (ORIGINAL) The apparatus according to claim 6,
wherein said control circuit is further configured to determine a
position of a top edge and a left edge of a chroma block of said
current macroblock.

8.   (PREVIOUSLY PRESENTED) The apparatus according to
claim 7, wherein said reconstructed samples comprise a plurality of
reconstructed samples in a row adjacent to said top edge of said
chroma block.

9.   (PREVIOUSLY PRESENTED) The apparatus according to
claim 7, wherein said reconstructed samples further comprise a
plurality of reconstructed samples in a column adjacent to said
left edge of said chroma block.

10.   (CANCELED).

11.   (CANCELED).

12.   (CURRENTLY AMENDED) An apparatus comprising:
means for generating a plurality of reconstructed samples
in response to a plurality of macroblocks of an input signal; and
means for (A) generate a plurality of sum values based on
said reconstructed samples, said sum values being used in defining

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a plurality of ~~formulas organized as a plurality of groups~~ ~~prediction types based on a number of said sum values that are~~ ~~available~~ and (B) individually determining a plurality of intra prediction chroma mode 0 predictors for each of a plurality of chroma sub-blocks respectively of a current macroblock, wherein (i) all of said intra prediction chroma mode 0 predictors are generated using said formulas in a first of said groups ~~prediction types~~ when all of said sum values are available~~,~~ and (ii) both (a) ~~a first~~ ~~subset of~~ one said intra prediction chroma mode 0 predictors is ~~are~~ generated using a respective one of said formulas in a second of said groups ~~said first prediction type~~ and (b) a remainder ~~second~~ ~~subset~~ of said intra prediction chroma mode 0 predictors are generated using respective ones of said formulas in said first group ~~a second of said prediction types~~ when only a single one of said sum values in unavailable.

13. (CURRENTLY AMENDED) A method for intra prediction of a chroma block comprising the steps of:

(A) generating a plurality of reconstructed samples in response to a plurality of macroblocks of an input signal;

(B) generating a plurality of sum values based on said reconstructed samples, said sum values being used in ~~defining~~ a plurality of formulas organized as a plurality of groups ~~prediction~~ ~~types based on a number of said sum values that are available~~;

(C)   determining a plurality of intra prediction chroma mode 0 predictors for each of a plurality of chroma sub-blocks respectively of a current macroblock individually, wherein (i) all of said chroma mode 0 predictors are generated using <u>said formulas in</u> a first of said <u>groups</u> ~~prediction types~~ when all of said sum values are available~~,~~ and (ii) both (a) ~~a first subset~~ <u>one</u> of said intra prediction chroma mode 0 predictors <u>is</u> ~~are~~ generated using <u>a respective one of said formulas in a second of said groups</u> ~~said first prediction type~~ and (b) a <u>remainder</u> ~~second subset~~ of said intra prediction chroma mode 0 predictors are generated using <u>respective ones of said formulas in said first group</u> ~~a second of said prediction types~~ when <u>only</u> a single one of said sum values in unavailable; and

(D)   generating a compressed and encoded video bit stream using said intra prediction chroma mode 0 predictors to reduce spatial redundancy.

14.   (CANCELED).

15.   (CURRENTLY AMENDED) The method according to claim 13, wherein each of said <u>formulas</u> ~~prediction types~~ used to generate each of said intra prediction chroma mode 0 predictors is selected independently in response to availability of said reconstructed samples adjacent to said chroma block.

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16. (ORIGINAL) The method according to claim 13, further comprising:

generating said reconstructed samples by inverse quantizing and inverse transforming a compressed bitstream.

17. (CURRENTLY AMENDED) The method according to claim 23, further comprising:

generating all of said intra prediction chroma mode 0 predictors using ~~said formulas in~~ a fourth of said ~~groups prediction types~~ when none of said sum values are available~~, wherein said prediction types comprise at most four of said prediction types~~.

18. (CURRENTLY AMENDED) The method according to claim 17, wherein ~~all of~~ said ~~formulas in said fourth group third prediction type~~ comprises a median chroma value.

19. (CANCELED).

20. (PREVIOUSLY PRESENTED) The method according to claim 13, wherein each of said intra prediction chroma mode 0 predictors comprises a weighted average of one or more of said sum values.

21. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said second processing circuit is further configured to generate all of (i) ~~a third subset~~ <u>one</u> of said intra prediction DC predictors using <u>a respective one of said formulas in said first group</u> ~~said first prediction type~~, (ii) ~~a fourth subset~~ <u>two</u> of said intra prediction DC predictors using <u>respective ones of said formulas in said second group</u> ~~said second prediction type~~ and (iii) a <u>remainder</u> ~~fifth subset~~ of said intra prediction DC predictors using <u>said formulas in</u> a third of said <u>groups</u> ~~prediction types~~ when <u>only</u> two of said sum values are unavailable.

22. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said second processing circuit is further configured to generate a signal carrying mode information that identifies said <u>formulas</u> ~~prediction types~~ used to generate said intra prediction DC predictors, said apparatus further comprising an encoder configured to generate a compressed and encoded video bit stream incorporating said mode information.

23. (CURRENTLY AMENDED) The method according to claim 13, further comprising:

generating all of (i) ~~a third subset~~ <u>one</u> of said intra prediction chroma mode 0 predictors using <u>a respective one of said formulas in said first group</u> ~~said first prediction type~~, (ii) ~~a~~

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~~fourth subset~~ <u>two</u> of said intra prediction chroma mode 0 predictors

using <u>respective ones of said formulas in said second group</u> ~~said~~

~~second prediction type~~ and (iii) a <u>remainder</u> ~~fifth subset~~ of said

intra prediction chroma mode 0 predictors using <u>said formulas in</u> a

third of said <u>groups</u> ~~prediction types~~ when <u>only</u> two of said sum

values are unavailable.

      24.   (CURRENTLY AMENDED) The method according to claim

13, further comprising the step of:

      generating a signal carrying mode information that

identifies said <u>formulas</u> ~~prediction types~~ used to generate said

intra prediction chroma mode 0 predictors, wherein said compressed

and encoded bit stream incorporates said mode information.